

AMATEUR RADIO

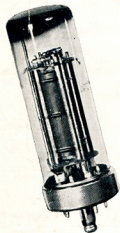
MARCH
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JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

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MARCH 1950

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EDITORIAL



Another year has passed and all Divisions are faced with the task of electing office-bearers for the ensuing year. Divisions which are blessed with plenty of enthusiastic members will have no difficulty in filling all posts; however, the less fortunate Divisions will have to depend upon the stayers to shoulder the load once again.

The Institute represents and upholds the interests of Radio Amateurs in Australia. We, as members of this vast brotherhood, owe much to the work of the Institute's office-bearers during the past twenty-five years. The least we can do to honor the memories of those pioneers of the past, whose keys have been silenced forever, is to carry on the work they so successfully began. Hence it behoves us all to share the burden of management by offering our services to the Institute whenever circumstances permit. We should all make some small sacrifice in the common good.

Younger members who have not the opportunity of gaining administrative experience elsewhere can, by acting as assistants, obtain much valuable experience as a reward for their services to the Institute.

It is only by the periodical change of office-bearers among all our members, that any suggestion of cliques can be disposed of and fresh approaches to stubborn problems made by fresh minds from new angles.

The encouragement and training of young, virile members willing to carry on the good work is the key to our future success. Those members who really have the interests of the Institute at heart will not leave it to the other fellow—something more concrete than lip service is required. Let us recapture the spirit of comradeship and endeavour to surpass the enthusiasm exhibited by the pioneers who raised the Institute's prestige to its present high level.

—G. G.

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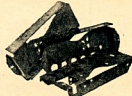
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Converting the BC966A I.F.F. Unit

AS A 144 Mc. PARALLEL OSC. AND SUPER-REGEN. RECEIVER

BY J. DUNCAN,* VK3VZ

This unit, now available to the Amateur, can be converted into a very nice 144 Mc. outfit, which can be used for both portable or home location work. In the form suggested it will consist of a parallel oscillator using 7193s, modulated by any suitable modulator, a suggested arrangement being a 6SH7 speech amplifier, feeding a 6V6G as modulator.

On the receiving side a 7193 is used as a super-regenerative detector, and two 6SH7s as audio amplifiers. If it is desired to use a speaker, the second audio stage could be changed to any suitable output valve.

GENERAL PRINCIPLES OF OPERATION

The I.F.F. Unit picked up the Radar pulse, triggered the transmitter, causing an identification pip on the scope. Two 7193s were used in parallel for transmission, and through internal arrangements, one was used as a super-regen. detector, with its companion 7193 biased off, then when suitably triggered, both 7193s would transmit as a parallel oscillator, the frequency being varied throughout the band by a motor driven inductance loop.

The remaining 7193, in the end box, was used as an ordinary oscillator for identification purposes. The seven 6SH7s and three 6H6s were used in the various pulse circuits, and are of no use for our applications, so all wiring except filaments are removed from these tubes.

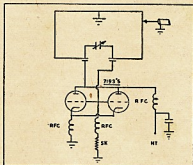


Fig. 1.

CONVERSION

The first step is to separate the power supply and r.f. sections, taking care to disconnect the arm which drives the oscillating inductance loop.

The box containing the two 7193s is altered first. This becomes the oscillator (see Fig. 1). Remove the 6H6 and its associated condensers and r.f. chokes. Take out the variable inductance loop and shaft. Remove the r.f. choke to one

7193 grid, and the wire going from this choke out through the hole in the box. Join the 7193 grids together. Trace the wire from the other 7193 grid, disconnect under the chassis, and connect a 5,000 ohm resistor from this point to earth. Remove the leads from the bottom ends of the r.f. chokes in the cathodes, ground one, remove the other, and join the cathodes together, after removing the small condenser between the cathodes.

Trace the h.t. lead from its r.f. choke and connect to a suitable point for h.t. of 250 volts. If it is desired to use one of the relays for changing from send to receive, this lead can be connected to a suitable point on the relay.

It is advisable at this point to check the operation of the oscillator, so remove all tubes except the two 7193s and apply filament and 250 volts of plate supply from a suitable source. Before doing so, however, it will be necessary to see if the filaments are wired in series or parallel, it varies in the different models. A meter in the grid circuit will give an indication of oscillation, and providing the previous instructions have been carried out the oscillator will work correctly. The oscillator frequency can then be adjusted to the 144 Mc. band by means of the ceramic trimmer on the inductance loop.

All that remains to be done is to provide a simple means of changing the frequency through the band. This can be done in two ways, either by making a small loop and fitting it in the place where the previous variable loop was mounted (the original loop had too great a variation); or by mounting a suitable variable condenser to give the necessary small frequency change.

RECEIVED

The 7193 in the box at the other end of the chassis is converted into a super regenerative detector by a few simple modifications.

First remove the 6166 socket and all its associate wiring from the box, then unscrew the screws holding the front left hand corner and the rear right hand corner of the box, this will enable the front and right hand sides of the box to come away with its associate wiring. Cut off the wires going from the mounting strip on the grid side, remove the two small condensers, leaving the condenser which goes from the 7193 grid to the stator of the condenser. Fit a 5 megohm grid resistance across this condenser (the value of 1 megohm shown in the diagram of Fig. 2 was not large enough), and also remove the Hi-Lo switch, and its condenser and resistance.

Unsolder the existing tank inductance and wind one with about No. 14 gauge wire, identical in shape, but with one additional turn. Solder one of the 5 pF. condensers, removed previously, across this inductance. Re-solder the r.f. choke which connects to h.t. on to the centre of the coil, and by-pass as shown in Fig. 2 with a 0.001 μ F. condenser. Re-

move the lead which connects to the cold end of the 7193 cathode r.f. choke and ground this end of the choke. It is most important that this cathode r.f. choke be used, otherwise difficulty will be had in making the tube oscillate. Re-assemble the sides of the box.

Two of the relays at the rear of the box are removed, and a suitable 3:1 audio transformer is installed. The 20,000 ohm variable potentiometer is removed from its bracket and installed in any convenient place on the front panel, as a regeneration control and connect to 250 B+ through a 10,000 ohm resistance. With a pair of headphones installed on the output of the transformer, the detector can be checked. As the regeneration control is advanced the detector should go into oscillation with the characteristic hiss of the super-regen. With a suitable piece of wire for an antenna, it should be possible to receive the harmonics of an alignment oscillator; the super regenerative hiss will die away when the signal is tuned in, if everything is working correctly.



Fig. 2.—Grid resistance should be 5 megohms, not 1 meg. (see text).

The frequency can be checked with an absorption wavemeter, and the turns of the inductance compressed or expanded to enable the condenser to cover the band. It will just do this with a small margin to spare at each end of the band.

To enable a suitable dial to be fitted, the slotted bakelite knob is removed and an extension shaft fitted. The dial can then be fitted with a suitable calibrated scale if desired.

There is one point to watch. A shorting wire is connected across the co-ax socket inside the box of the single 7193 compartment, which is directly across the link to the antenna, its purpose is unknown to the writer, but it should be removed.

The audio stages of the receiver can best be left to the choice of the individual constructor, but plenty of sockets and 6SH7s are available for the purpose.

POWER SUPPLY

Here again no two Hams will think alike, but we can (a) remove the motor generator, etc., and substitute an a.c. power supply, or (b) leave the motor generator for portable operation, and make provision for connecting an external a.c. supply. The latter seems the best idea, although the writer shuns the thought of super regen. receivers in suburban locations.

However, as the conversion of this side of the unit is quite straightforward

* Technical Editor, 23 Parkside Avenue, Balwyn, Victoria.

no attempt will be made to describe it and it can well be left to the discretion and ingenuity of the Ham.

The voltages required for operation of the complete unit is 250 volts, which can be obtained from the motor generator by running the 9 volt generator (fed from 12 volts through a regulator originally) off 6 volts, which will give about 250 to 300 volts. In the case of the 24 volt model, running the generator from 12 volts will allow the same outputs to be obtained.

The writer feels that this unit is ideal for portable operation, and it would be difficult to beat for this purpose. At the home location, it would be a simple means of starting up on this very fascinating band.

A 288 Mc. TRANSCEIVER

BY A. K. HEAD,† VK3AKZ

After acquiring a BC966A L.F.F. Unit, it was decided to try and convert it to a transceiver for 288 Mc. From the many components in the set an audio section can be made up in many ways according to one's taste. Since audio circuits for transceivers are given in most handbooks, this part of the conversion will be taken as read.

Of more interest is the conversion of the r.f. sections. In the set there were two r.f. circuits. One consists of a single 7193 oscillator tuned by a split stator condenser and coil, and a range switch which adds a fixed condenser across the tuned circuit. Also in the same compartment is a 6H6 which rectifies some of the r.f. to actuate a remote meter to show the set is operating. This circuit was changed to a 288 Mc. super-regen. receiver in the following manner.

The following components were removed from the compartment as they are not needed: 6H6 socket and associated r.f. chokes, high-low range switch and fixed condenser, terminal strip.

The grid of the 7193 was connected to one stator of the tuning condenser via a 1 megohm resistor and 20 pF. condenser in parallel. The plate connection was left as found. As the frequency coverage of the original circuit was 180 to 210 Mc. approx., the coil was replaced by a hair-pin of length 1½ inches and width ⅜ inches soldered to the tuning condenser.

H.T. is applied via one of the salvaged r.f. chokes to the centre of the loop. Super-regeneration was smooth and the range of the tuning condenser covered the 288 Mc. band with plenty to spare.

The other r.f. circuit consists of two 7193s essentially in parallel. The range of the tuned circuit for variation of the ceramic condenser and tuning loop was found to be from 130 to 210 Mc. approx. As the prospect of getting the parallel tubes up to 288 Mc. did not appear bright, a push-pull grounded grid oscillator circuit was tried.

To do this, everything was removed from the inside of the compartment. The two grids were connected together and earthed through a 5,000 ohm resistor. The plate circuit consists of a loop run straight out from the plate caps and 2½ inch long H.T. is applied through a salvaged r.f. choke to the mid-point of the loop.

Feed back is provided by the existing chokes in the cathode circuits. However it is important to remove a small 10 pF. condenser which connects the two cathodes together for parallel operation.

For 6 volt operation of the filaments, the existing series connection must be changed. To keep the feed back up, it was found necessary to use r.f. chokes in the heater leads as well as the cathode lead.

AND NOW A MODULATED OSCILLATOR ON 144 Mc.

BY C. GIBSON,† VK3FO

This conversion of the 966A to the 144 Mc. band is quite simple and should present no difficulties to the Ham. The first operation is to remove the unit that carries the 7193 and 6H6 from the chassis. The leads from this unit go through a grommet at the back of the box—snip them off. Next step is to completely remove the 6H6 socket and all its associate wiring from the unit. Also remove the switch marked "high-low" and its associate resistor and condenser. At the back of the unit there are the chokes, resistors, and condensers associated with the 7193. Leave all these parts "as is."

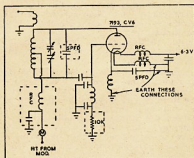


Fig. 3.—Added components shown enclosed by dotted lines. Details of modified coils in text.

Next step is to make a new tank coil. Remove the two-turn coil from the condenser and wind a 2½ turn coil on ¼ inch diameter spaced over ⅜ inch. Place this new coil in place of the old coil. Now bring a lead from your h.t. power supply (280-300 v.) to one side of an r.f. choke (there are plenty in the chassis) and from the other side of the choke tap it on to the centre of the tank coil. Be careful to by-pass the choke with a mica condenser (spare from the 6H6 socket).

Now for the grid leak. This is put in from the end of the two ceramic condensers furthest from the split stator variable (inside the unit). One side of the grid leak to the cold end, and the other to earth. The value of the grid leak is 10,000 to 15,000 ohms and should be determined by experiment.

Place across the tuning condenser a 5 pF. ceramic condenser (obtained from the 6H6 socket). The aerial coupling coil can be two turns of ¼ inch diameter and placed about ¼ to ⅜ inch from the tank coil.

Earth one side of the filament wiring and the other end of the cathode r.f. choke a milliamp. meter should be placed in the plate circuit as this will indicate if the oscillator is super-regenerating. The 7193 should draw approx. 25-28 Ma. with 280 plate volts. A greater current than this will exceed the tube ratings, while if the tube draws less than 20 Ma. it is almost certainly super-regenerating. The grid leak should be experimented with to obtain satisfactory operation.

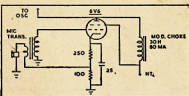


Fig. 4.—Modulator for 966A Conversion.

You should strike the band with the condenser about two thirds of the way in. If by any chance the band cannot be found, try opening or closing the tank coil, as the circumstances warrant.

Ordinary Heising modulation is quite OK with this conversion.

One last word—when modulating do not speak too loud, otherwise the oscillator will be frequency modulated. The circuit of a suitable modulator is shown in Fig. 4.

EMERGENCY WORK AWARDS

The following letter was received by the Secretary of the N.S.W. Division from the N.S.W. Commissioner of Police, Mr. J. F. Scott.

"Reviewing assistance rendered to the Police by civilians during the disastrous floods this year (1949), particularly in June last in the Maitland district, I would like to take this opportunity of expressing through you the appreciation of the Police Authorities to the operators of Amateur Wireless Stations who placed their radio stations at the disposal of the Police and relayed messages which could not otherwise have been passed between Maitland and East Maitland and the Police Wireless Station at Waratah, and also reduced congestion on the Maitland Police telephone line.

"The Amateurs who undertook the greater part of the relay work were Mr. V. A. Holmes (VK2AKP), Mr. H. E. Whyte (VK2AHA), and Mr. R. J. Traill (VK2XQ).

"Perhaps you would be good enough to pass on to the gentlemen concerned the attached certificates of appreciation from the Police Force of N.S.W. for the services rendered by them. They may like to include the certificates amongst their collection of cards and certificates received in connection with the operation of their respective wireless stations.

"In addition, a number of other Amateurs rendered assistance from time to time in various ways and I would like you to convey to them, through the columns of your journal, the thanks of the Police Authorities for their public spirited actions."

† Assistant Technical Editor, 12 Pevenell Street, Balwyn, E.8, Victoria.

† 424 Centre Rd., Bentleigh, S.E.14, Vic.

Further Notes on De Luxe V.T.V.M.

CORRECTIONS

1.—In several places in the article reference was made to the .25 and 3 volt ranges, this should read 2.5 volt and 3 volt ranges.

2.—Page 7, col. 2, para. 3: "If negative voltages have to be read, the a.v.c. line in a receiver for example, the ground side of the v.t.v.m. is connected to the chassis of the receiver and the active prod applied to the a.v.c. line with the function switch on D.C. Minus.

FILAMENT CONNECTIONS AND VOLTAGES

It will be noted in the wiring diagram last month that the rectifier is shown fed from a separate filament winding. If a 6X5GT rectifier is used it can be taken from the common 6.3 volt filament winding.

Further tests have shown that in the case of nearly all 6SN7s, the first 6SN7 (cathode follower) can be supplied from the common 6.3v. supply, thereby reducing the number of filament windings required to one. One side of this winding should be earthed, and the other side run in shielded braid, as it is most important that a.c. be kept from the wiring of the resistance "stick" and associate circuits. As an example of this, when the v.t.v.m. is switched to a.c. and on the low voltage range, placing the test prod near any a.c. or power wiring will cause a considerable deflection on the meter.

The following letter is to hand from Mr. Alec H. Clyne (VK3VX):—

"I have read with much interest the two articles entitled 'A De Luxe Vacuum Tube Voltmeter' in the January and February issues of 'Amateur Radio,' and wish to congratulate Messrs. Duncan and Thornton on their efforts.

"At the same time I feel that it is necessary to point out an error, due to a popular misconception, which appeared in the second article, in the following paragraph:—

"... remember the negative terminal on the v.t.v.m. is connected to earth through the 3-pin mains plug, so only use the active lead in reading mains voltages."

"Wiring rules, as used in all States, require the third pin of the socket to be earthed only in 'Earthed Situations,' i.e. situations where a person using an electrical appliance can simultaneously touch any earthed metalwork, or stand on a conducting floor such as concrete. In domestic installations it includes kitchens, laundries, bathrooms, and external points. In very few domestic premises is the third contact earthed in living rooms, bedrooms, etc., although when carrying out a new installation or adding to an existing one, it is good practice to take an earthing conductor to every plug socket.

"It will be seen that the supposed earthing of the v.t.v.m. through the power point may be non-existent.

"A further point concerns the actual measurement of a.c. mains voltage. If measured between earth and the active

line (of the mains), a false reading may be obtained, as the 'neutral' conductor may be in some cases as much as 50 volts above earth.

"Modern practice is to earth the neutral at the power station, at distribution transformers and other places along the route, and at the switchboard of every installation. This system, known as the Multiple Earthed Neutral (M.E.N.) System, was coming into general use at the outbreak of the recent war, but material shortages have delayed its full implementation. Hence in many areas the neutral is still not earthed at the consumer's end and may therefore have a potential above earth, at the socket, due to voltage drop in the line back to the transformer serving the particular area. This voltage drop will vary with load and distance.

"The M.E.N. System, by the way, has nothing to do with the Earth Leakage Circuit Breakers to be found on many switchboards. They are the basis of another story, and to spare the blushes of the Supply Authorities we will not go into that here.

"A word of caution—if your premises are wired on the M.E.N. System, the neutral, although earthed at the switch-

DIAL SCALES FOR V.T.V.M.

Dial scales for the De Luxe V.T.V.M., described in the last issue of 'Amateur Radio,' can be obtained by applying to the W.I.A. Victorian Division, 191 Queen St., and remitting 1/- to cover cost of printing and postage.

Dial Scales for both 2.5 volt and 3 volt ranges are available.

board, must not be used as an earthing line, as it has no over-current protection."

It is regretted that this subject was not covered more fully, but what was meant to be conveyed was as follows:—

Assuming a receiver is under test, before testing filament and transformer voltages with the v.t.v.m., it is advisable to check the mains voltage. The most convenient point will be the board on the power transformer. If the v.t.v.m. leads are placed on the terminals indiscriminately, the chances are the earthed lead of the v.t.v.m., assuming an earthed 3-pin plug connection to the v.t.v.m., will be connected to the active a.c. lead, which will result in a blown fuse and possibly a damaged prod.

First find the active with the red probe, and then when that is done, the black probe can be safely applied to the other mains terminal.

But it is important to know which is the active terminal before applying the negative or black lead to any a.c. mains. As pointed out by Mr. Clyne, a faulty reading would be given in some cases if we took a reading between the active and earth, instead of active and neutral.

If there is any doubt that the 3-pin power outlet used does not have the third pin earthed, or it is used in places where only 2-pin outlets are available, it will be necessary to take an earth wire to the nearest earth point, if a.c. mains measurements have to be taken. It is wise anyway to have the v.t.v.m. case earthed.

In the writer's opinion, he feels that in the interests of safety, unless you are sure of what you are doing, do not use the v.t.v.m. for measurement of a.c. mains voltages, better use a separate meter and live a little longer to enjoy Ham Radio. After all, this v.t.v.m. will measure almost everything else, so this one drawback is not important.

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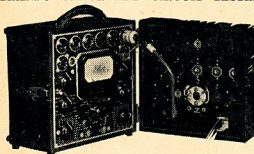
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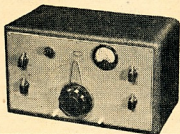
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ENQUIRE FROM YOUR NEAREST SUPPLIER

A Simple 80 Metre Station

BY HANS J. ALBRECHT, DL3EC

Hans J. Albrecht, DL3EC, has now come to live in Australia and for the benefit of all his old DX contacts, here is the rig he used in Germany.

Some aspects of his station would be frowned on by the authorities here, namely the use of an e.c.o. directly coupled to the antenna, and also the modulation of this oscillator.

Nevertheless, by using a crystal oscillator ahead of the r.f. unit, a very simple beginner's station could be developed.

Amateur Radio is mostly said to be an expensive hobby. It is also believed that the construction of all the necessary sets takes a long time. But there is one way to make equipment cheap and quickly constructable, i.e., to use the simplest components only. In the following, the writer will describe such a construction, namely the 80 metre rig, which was built and successfully operated by him from the receipt of his DL call sign until his departure from Germany for Australia.

The writer's station consisted of a receiver with plug-in coils for 20, 40 and 80 metres, and a transmitter for 80 metres, except other sets for other wavelengths. The 80 metre rig worked in the following manner.

Receiver O-V-2. The aerial was inductively connected to a normal audion with reaction coupling effect (see diagram). The valve applied to this stage was a RV-12-P-2000 (German valve, for data see table). The adjustment of the reaction was effected by variation of the screen grid voltage. The following I.f. stage was coupled by resistance coupling. The valve of this stage was another RV-12-P-2000. Both these stages were mounted in a chassis of aluminium. Moreover there was a I.f. power stage for reception by loudspeaker. In this stage a RV-12-P-3000 (German valve, for data see table) was used. The coupling was effected by a I.f. transformer 1:4. The loudspeaker had a small diameter.

The heater supply for these three valves was directly taken from the network, which had 220 volts a.c., in the following manner. The filament of the RV-12-P-3000 was connected in series with the filaments of the both RV-12-P-2000, which was connected in parallel with a shunt, and a paper condenser of 3.5 uF. The anode voltage was taken from the power supply.

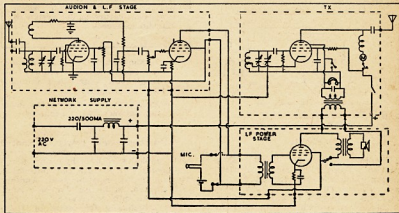
The power supply consisted of a selenium rectifier and a smoothing circuit which was formed by two electrolytic condensers of 32 and 24 uF. respectively, and a smoothing choke. No transformer was used and, therefore, the output voltage came only to about 220 volts d.c.

Transmitter: A LS-50 (German valve, for data see table) was used as an e.c.o. The variable condenser of the oscillator circuit had 100 pF. The coil was wound up on a ceramic coil former with copper wire (diameter 0.06"). A trimmer of 30 pF. was connected in parallel to this circuit. The screen grid was connected to the earth by a condenser of 1 uF. The screen grid resistor came to 10,000 ohms. The aerial was directly coupled to the anode by a condenser of 100 pF. Moreover, the anode was connected to a switch through a h.f. choke, which consisted of a normal iron-core coil former wound by about 50 windings of 0.01" copper wire, a milliamperemeter and the key. This switch closed the connection with the power supply at position "transmitting" and disconnected at position "receiving" (see diagram).

prior to leaving Germany. For that, some alterations were necessary in the rig and are described below.

Telephony operation. The writer chose suppressor-grid modulation because of the lower cost. The modulation amplifier used was the same I.f. power stage as described above. At position "transmitting," the connections to the receiver (chassis) were interrupted, and the input transformer of this stage was connected to a simple carbon mike, which was mounted on a small wooden board. This microphone was one of a normal telephone apparatus. The driving element consisted of a pocket lamp battery of 4.5 volts (see diagram).

At phone transmission, the output of the I.f. power stage was disconnected from the loudspeaker transformer and connected to a I.f. transformer 1:4,



Circuit Diagram of DL3EC's 80 metre station.

The input power came to 6 watts, because the anode voltage taken from the output of the power supply was only 220 volts. The whole transmitter was mounted on a wooden board. The heater supply was directly taken from the network, whilst a glow lamp of 200 watts (for 220 volts) and a small resistor were used as series resistors, because a transformer was not on hand.

Aerial: A windom aerial, 40 metres long, was lowly strung over a yard.

With this station the writer worked many Hams on c.w. The reports were permanently sufficient. The tone was in every QSO T9, and the frequency was always stable. Moreover, the writer worked on telephony with the same rig

whose secondary winding was connected, on the one hand, to the suppressor-grid and, on the other hand, to the earth wire. A condenser of 0.01 uF, and a pair of headphones was connected in parallel to the secondary winding. Although the apparatus worked without suppressor bias, the reports on the modulation were permanently good.

The successes of this station and, first of all, the good quality of transmission prove that Amateur Radio is also possible with the simplest and cheapest sets. Although the power input was only 6 watts, the writer was able to QSO stations in all parts of Germany on c.w. and phone. By another rig, of course, DX QSOs were carried out.

TABLE OF THE PENTODE VALVES USED

(Taken from a German Valve Table)

Type	Filament		Anode		Screen		Grid Bias Volts	Mutual Conduct. Umhos	Power Output Watts
	Volts	Amp.	Volts	Amp.	Volts	Amp.			
RV-12-P-2000	12.6	0.075	210	0.002	75	0.0006	-2.3	1,500	0.9
RV-12-P-3000	12.6	0.21	250	0.02	200	0.0023	-2.5	10,000	3
LS-50	12.6	0.7	300	0.130	250	0.0035		4,000	18

Note.—The RV-12-P-3000 and LS-50 were operated with under-voltage (see text).

MAGSLIPS AND THEIR USES

BY D. L. ASPINALL*

GENERAL PRINCIPLE

Each Mag slip consists of a stator and motor, the stator being wound with three sets of windings at angles of 120 degrees in much the same manner as the stator of a three phase induction motor. The three windings are termed phase windings, although in point of fact the currents induced in them differ only in magnitude and not in phase.

The rotor varies in form according to the specific purpose of the Mag slip. In the case of a receiver used for indicating purposes only, it is an L shaped piece of iron mounted on the shaft and energised by a fixed coil by means of a magnetic slip ring. The rotor of the Mag slip transmitter is an H shaped iron core with a single winding, or its equivalent in the form of a slotted drum armature.

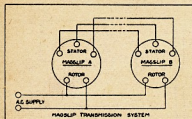


Fig. 1.

The basic scheme for Mag slip transmission comprises two similar elements having their rotors energised from a common a.c. supply, and their stator windings connected in parallel "phase to phase" as shown in Figure 1 for the Mag slip System. Voltages will be induced in the stator windings, their magnitudes depending upon the position of the rotors. If these are in coincident angular positions, the induced voltages will be equal and there will be no current flow between the stators. If one rotor is now displaced with respect to the other, the balance is upset, and equalising currents will flow in the stator windings, thus producing torque which tends to restore the rotors to coincident positions. Thus if one rotor is turned, the other will follow within very fine limits of angular accuracy of the order of 1% in the case of remote indicators.

USES OF MAGSLIPS

The duties which Mag slips may be called upon to perform are legion and may be considered as being limited only by the ingenuity of the user. A few of the more common types are given as follows:—

Power control of a remote mechanism from a director.

Remote indication of the movement and position of a mechanism.

Mag slips are a type of small selsyn developed originally by the Admiralty to provide remote indication and control in naval ships. They were adopted and used in large numbers by the other services, and since their removal from the secret list they have become available to the public.

These units are generally described rather loosely by disposals organisations as "selsyn motors," but there are about one hundred different types of mag slip elements. Only one or two types, however, are easily obtainable secondhand.

The name is derived from the words "magnetic slip ring," which is a basic feature in the design of Mag slip receivers.

The summation of two or more movements with indication of the result, and control of a mechanism accordingly.

A synchronous link or electric gear—between two mechanisms.

Electrical computation.

When considerable power is required to operate or control a mechanism, a servo device, such as a hydraulic pump and motor with a valve controlled by a Mag slip hunter, may be used. Another method involves the use of a coincidence transmitter and thermionic amplifier. Basic schematics for some of these devices are shown.

Two methods of using single Mag slip transmitters on direct current as indicators or remote control devices will now be described. It is considered that these schemes will be of more interest to the Amateur or Experimenter than any of the above.

The first method involves the construction and use of a controlling element in the form of a potentiometer. Sketches of this as constructed by the author are shown in Fig. 2. It consists of a revolving resistance unit wound on a flat ring of durabestos, having leads for the d.c. supply tapped into two opposite points on its inner circumference. It is clamped between two discs of the same material, and six fixed contacts are arranged so that they are equally spaced around its periphery and bear on the resistance wires as the unit is rotated.

Six leads from these contacts are taken to appropriate points on the Mag slip stator as shown in the connection diagram Fig. 3. This is fully explained later. The resistance may be wound with Nichrome wire of about 0.022" diameter. Sufficient should be wound on to give a resistance of about 8 ohms measured between opposite points on the circumference. (Using a Mag slip of 50 volts a.c. rating.)

As continuous rotation was desired, slip rings were used to lead the current into and out of the resistance, but if not more than one revolution in either direction is required, flexible leads could be used here to simplify matters.

As previously mentioned, it is necessary to have six leads from the stator of the Mag slip. These consist of the three existing leads together with three new ones obtained by disconnecting the star point on the windings. The three internal leads forming the star point must be very carefully located and disconnected. Flexible leads should be soldered and tied on, and brought out through extra holes drilled in the end casing of the Mag slip.

Now as to the operation of this scheme, rotation of the resistance will obviously apply the maximum d.c. voltage to each phase winding of the stator in turn, thus producing a revolving field which follows the movement of the potentiometer. Since the rotor is ener-

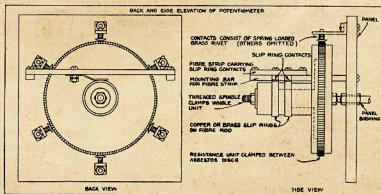


Fig. 2.

* C/o. Technical College, Hobart, Tas.

gised from the same d.c. supply, it also follows this around.

The second arrangement for use with d.c. current is known as the "M" motor or step by step system (Fig. 4), in which one complete revolution of the rotor is performed in 12 definite steps of 30 degrees each. Referring to the diagram, the idea is to connect points 1, 2 and 3

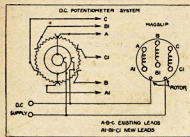


Fig. 3.

of the stator winding to a d.c. source in the sequence shown in the accompanying table. By this means the resultant field is caused to revolve in steps of one twelfth of one revolution. The switching may be conveniently done with a three pole twelve position wafer switch. As the table indicates, the first step is the connection of the supply positive to 1 and the negative to both 2 and 3. As the rotor is also energised, its position will be decided by the resultant field set up by three stator windings.

Using Magslips of 50 volts a.c. ratings, a 6 volt d.c. supply will give a fairly useful torque, but this can be nearly trebled by using twelve volts. This applies to both the above arrangements. A test taken with the potentiometer arrangement showed that practically the same torque was available using a 12 volt supply as was obtainable with the normal Maglip transmission system using 90 volts a.c. The important advantage of the d.c. systems is that heating is reduced sufficiently to allow of continuous operation.

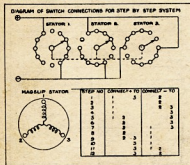


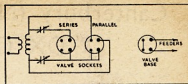
Fig. 4.

Finally, if such uses can be found for them, Magslips may be used quite successfully as alternators and synchronous motors with the rotor energised with d.c., and even as straight three phase induction motors, developing a surprising amount of power for such small units. The last is possible in the case of most transmitters as the rotors have two windings, one of which is closed upon

itself. As a word of warning, be extremely careful of the windings, as close examination will reveal that they were apparently not put there by human agency, but like Topsy, "just grewed." It will be found an almost impossible task to replace them if they are burnt out or damaged badly.

Series or Parallel Tuning

If you are using one of those multi-band antennae that require series tuning on some bands and parallel tuning on others, then try this scheme for a quick and easy change-over.



Connect your antenna tuning circuit to two four-pin valve sockets and your feeders to an old valve base as shown in the diagram. A series or parallel connection is then obtained by plugging into the appropriate socket—VK20A. R. M. Winch, 38 Boundary St., Parramatta, N.S.W.

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The Christchurch Branch of the New Zealand Association of Radio Transmitters will hold a contest to celebrate the first Centennial of the Canterbury Province, 1840-1940.

RULES

1. The contest shall be held from 0901 hours N.Z.S.T. 25/3/50 to 2359 hours on 26/3/50.
2. All New Zealand and Rarotongan stations competing shall be financial members of the New Zealand Association of Radio Transmitters.
3. Phone and/or c.w. may be used, and all operations, whether on phone and/or c.w. shall be within the above period.
4. All contacts shall be with duly licensed Amateur Stations.
5. Only one contact may be counted with any one station during the duration of the contest. However, points may be claimed if the same station is worked on more than one band, or on a different type of emission (phone or c.w.).
6. No schedules will be permitted.
7. The 3.5, 7, 14, and 28 Mc. bands only will be used.
8. All entrants must adhere to the regulations as issued by the authority which issues the licence under which they operate.
9. Only one operator per station and one station per operator, otherwise separate logs must be submitted.
10. A serial number will be sent and received, the number to consist of six figures in the case of a c.w. station and five figures in the case of a phone station. The first three (or two in the case of phone) to constitute the signal report and the last three to be the contact number in the contest. The contact number for the first contact would be 001 and for the 158th contact, 158; this series to be preceded in all cases by the signal report given. Should any station work any more than 1,000 stations, the 1001 contact would be numbered 001, and so on.
11. New Zealand and Rarotongan stations shall work all overseas stations and shall claim one point per contact with a multiplier for each country worked as per latest A.R.R.L. countries list.

12. Overseas stations shall work as many New Zealand and Rarotongan stations as possible.

13. Certificates will be awarded as follows:—
7 Mc.—c.w.
14 Mc.—c.w., phone, and combined operation.
28 Mc.—c.w., phone, combined operation, and world-wide winner.
All band—c.w., phone, and combined operation.

A certificate will be issued in each of the above classes to winning contestants in each country and in each call area in the United States of America. However, the contest committee reserves the right to allot one set of certificates to a group of call areas should the entries received not warrant a separate set of certificates being awarded to each area.

14. A separate contest will be held on 80 metres for all New Zealand Amateurs who are not holders of high frequency permits.

15. Scoring for 14 above shall be as follows:—One point per contact with a multiplier for each DX district worked, and a multiplier of 5 for each overseas country worked including Rarotonga. VK3-3-4-5-7 to count as one country, and VK6 as a separate country.

16. A monitoring committee will be formed, this committee to have the power to disqualify any station or operation which may be considered contrary to good amateur practice. The decision of the committee to be final.

17. Each log entered will show the call sign, band used and type of emission. No contacts claimed, total points claimed, operator's name, and multiplier claimed. Then in columns: Date, time (local or GMT), called, answered by, serial, out, time, off.

18. Entry may be made in more than one section as per 13 above, and a separate log will be submitted for every section of entry.

19. All logs are to be forwarded to ZLALB, 4 Mary Street, Papanui, Christchurch, N.Z.

20. New Zealand logs to be in hand by 19/4/50, and overseas logs by 19/6/50. For this purpose Rarotonga will be considered as an overseas country.

21. Overseas stations will call "CQ ZL/ZK TEST" and ZL/ZK stations "CQ TEST."

IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

MARCH, 1950

Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:—

Zone	Region	Terminal
1	Western Europe	London
2	Mediterranean	Cairo
3a	N.-West America	San Francisco
3a	N.-East America	New York
4	Central America	Barbados
5	South Africa	Johannesburg
6	Far East	Manila

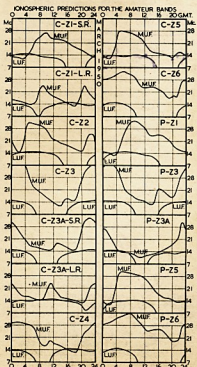
The Perth charts are similar to those based on Canberra.

QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Canberra-San Francisco circuit would be useful:—

1. Were good conditions experienced on 7 Mc. for the period 0700 to 1500 hours G.M.T.?
2. Was the 14 Mc. band workable from 1500 to 2000 hours G.M.T.?
3. Was the 28 Mc. band workable for several hours around midnight G.M.T.?

Answers to the Quiz should be sent to the W.I.A. and should, if possible, refer to consistent results obtained on the majority of days in the month.



Abstracts from Overseas Magazines

"ELECTRONICS," SEPTEMBER, 1949—

- P. 82: "How V.O.A. Combats Jamming;" G. Q. Herick—Description of speech clippers and limiters used by Voice of America to get through foreign jamming. The ideas used should be directly applicable to amateur operation.
- P. 88: "Citizens Radio Wavemeter;" W. B. Lurie. Detailed construction of a coaxial wavemeter for citizens band 460-470 Mc.
- P. 92: "Converters for V.H.F. Television Reception;" D. K. Reynolds and M. B. Adams—Converters for the 475-890 Mc. band. Local oscillators using 955 or 684 tube. Mixer uses 12X1 crystal diode. Cascade circuit used for first i.f. stage for low noise.
- P. 97: "Instantaneous Deviation Control;" M. B. Winkler—Simple circuit for limiting the deviation of a f.m. or p.m. transmitter. Introduces very little distortion and allows increased effective modulation without wide side bands.

"ELECTRONIC ENGINEERING, DEC. 1949—

- P. 448: "An Experimental Crystal Amplifier;" How to operate a pair of 12X4s to produce a crystal transmitter. Transconductance up to 5,000 can be got from such a home-built transistor.

"RADIO AND TELEVISION NEWS," NOV. 1949—

- P. 42: "A C.W. Filter;" G. L. Countryman, WIRBX—An audio phasing filter which will peak reject at any frequency which can be varied over the audio range.
- P. 60: "The Beginning Amateur;" R. Hertzberg, WIDJJ—Aspects of mobile operation.

"WIRELESS WORLD," DECEMBER, 1949—

- P. 489: "Suppressing Impulse Noise;" D. C. Rogers—Distinguishes impulse noise from modulation by its shorter duration. Very simple circuit but like all noise limiters which are after the detector, is less effective the narrower the receiver bandwidth.
- "SHORT WAVE MAGAZINE," NOVEMBER, 1949—
- P. 660: "A Transmitter for Beginners;" J. N. Walker, G6JXJ—Modern 25 watt for c.w. on the DX bands. 6V6 crystal oscillator, 807 p.a. and uses branded parts.
- P. 666: "Extended Double Zepp for Twenty;" A. G. Witham, G3AEX.—The construction and adjustment of an antenna with all round DX coverage and to fit in a long narrow space.
- P. 670: "Improving the Q5er;" R. W. Rogers, G6VXR—Replaces diode detector by an infinite impedance detector.
- P. 672: "Voice Controlled Transmission, Part II;" R. Knowles, G3AAAT.—Continuation of Part I giving final circuits with various improved features.
- P. 684: "Practice of QRP;" C. Prater, G5PPL.—Notes on low power working as found out the hard way.
- P. 685: "Power Pack PP-51/APQ9 on 50 Cycles A.C. Mains;" R. D. McQueen, G3GPM.
- P. 687: "Converter for Seventy Cms.;" G. M. King, G3MYJ.—12B18 crystal diode in co-axial line. Local oscillator is 14.5 on 14.4 Mc., other half triode to 482 Mc. and feeding crystal 3 Mc. i.f. channel.

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- ATKINS (W.A.) LTD., 894 Hay Street, Perth.
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- TASMANIA: W. & G. GENDERS PTY. LTD., 53 Cameron Street, Launceston, and Liverpool Street, Hobart.
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L1221 feeder is a 60 to 75 ohm balanced twin shielded RF cable used in conjunction with L306 and L307 above. No pick-up of noise can occur between the aerial and the receiver with this polythene insulated and screened with copper mesh type of cable.

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FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

The following letter from Jack Coulter, VK3AD, will be read with interest by all 50 Mc. men who have made a bee-line to the activities of Jack on location in Alice Springs.

OPERATION "AUNT SALLY"

In the past I have read of fellows who went "Ham Holidaying" at some outlandish spot with an equally outlandish call sign and resulting in their being very much in demand. This was my first experience of the holiday conditions.

I departed Parakee on 8th January with the blessing of the local v.h.f. gang—and a certain amount of their equipment.

On the evening of the following day the equipment set up. Owing to power failure it was not possible to use the gear until late at night (approx. 2230 C.S.T.) when it is believed that 4BT was heard, very weakly.

At 1033 C.S.T., 10th January, 4BT was copied at good strength, but no contact resulted. Nothing further was heard that day until 1905 hours when several VKs were heard. On calling CQ, 5RT replied and communication established. This made 5RT the first station to qualify for the V.H.F. W.A.S. Then followed 5QR and 5CU who also needed this contact for W.A.S. The band was still open at 2300 when I closed. Other VKs were contacted on the 15th and 15th.

On the 16th and 17th hours of listening and calling on the afternoon of the 15th, I contacted 6DW whose signals were 589. He remained audible for 20 minutes, but no other VKs were heard, unfortunately.

VK3 and VK5 joined the list of eligibles on the 16th when contacts were made with 2ABC, 2WV, 3WV, 3YS, 2AB4 and 3BD, in that order. These were isolated contacts on the 18th and 20th, leading up to Sunday the 22nd. What a day! I made a total of 36 contacts in the twenty-four hours. This determined the above title. The boys taking shots at me! I think it was only necessary to call CQ twice in the ten hours of operation.

VK4BT was again the first station heard but again there was no contact. Shortly afterwards the VKs were heard and several 589s resulted. Two of the boys in the case of the three with a vengeance. The VKs were readable until about 2000 C.S.T., with the exception of a period from 1530 to 1730. Incidentally, VK3BC was contacted during the peak of the opening to VK3.

At 2000 hours the three's were fading out and the five's were building up in signal strength. Several contacts were made with the five's. The South-easterns including one with 580. This station was unique in that he was not using a beam. He was using a "beam" type antenna featured some time ago in "A.R."

At the time of writing VK7 remains to be contacted. It is hoped that this will be achieved before my return to the south.

In conclusion, I would like to thank four VKs for their part in making this trip possible. 5GF and 14I for their very practical help, 5QR for his excellent publicity (I am sure the whole of Australia knew of the projected trip), and 5RT for his good wishes. It might add that it has been a most fun and my motor car has been impressed a local gentleman, now we may yet have a permanent 50 Mc. station in the territory.

WATCH OUT FOR—

North and South American 50 Mc. stations who will be watching for VK stations during the next three months.

V6GWI, at Wyndham, who will be operating shortly on 19 and 6 metres.
VK3ACL and VK3RR who will be operating portable from Cape Schanck on both 80 and 144 Mc. on a Sunday night in April, the actual date to be advised in our next issue. Eric and Dick are planning to make a southernmost trip of the continent across to VK7 on both bands. 3ACL will be operating on 40 and 80 metres during the week prior to 1st August in order to make arrangements. Cape Schanck is a small settlement on the Promontory operating Port Phillip Bay from Western Port Bay and the actual height of the location is about 450 feet above sea level and overlooking the sea.

50 Mc. ACTIVITY NEW SOUTH WALES

The Six Metre Contest came and went, and as is usual after a very active period, there was a corresponding low period of activity. This temporary condition has already passed and much discussion re 576 and 588 Mc. can be heard. Field days are again creating interest.

Much appreciation has been expressed for the efforts of VK5JD who, by dint of sheer hard work, provided many W.A.S. QSLs to his home QTH as the sojourn in Alice Springs is temporary only. Thanks from VK2 50 Mc. boys OM.

Fred, 2ABC, and 5WV, who were in the Contest and very deserving too. Fred definitely needed a holiday after it. No names, but a visitor found Fred asleep with his head alongside the key!! John 3WV has also an (Lb. score).

The January meeting of the W.I.A. V.H.F. Section was easily a record. The attendance being 36. The draw was "John's long distance" by 2UD. Bob cleared the air regarding noise factors. The lecture was particularly well received and informative. 2ADT and 2BZ made the trip and stayed with 2AH.

A great deal of thought is being given to mobile gear, particularly by v.h.f. chaps who have poor locations. February v.h.f. was very interesting and visitors and or newly v.h.f.-minded are 2AFZ, Eric, 2VF, Jack; and 2VF, Ivan. Dave Evans has passed the A.O.C.P. and is awaiting a call sign, congrats Dave! Royal Electrical Co. have presented the Section with a handsome Cup to be given to the Amateur who, during 1950, achieves the most outstanding v.h.f. work. Your suggestions are solicited. Suggestions received at the meeting were: (1) best piece of amateur made gear; (2) best lecture by v.h.f. Amateur; (3) best 144 Mc. achievement; (4) most advanced amateur. The committee understand that Ken, VK3AIL, is responsible for the above incentive. Thanks Ken.

Another suggestion was that a special certificate be presented to Amateurs who do outstanding work in any field.

VICTORIA

Conditions continued very good for sporadic E work during January and most interesting contacts were made. VK5JD operating from Alice Springs was the most sought after station on the band. He made the first appearance from 1850-1930 on the 16th January. Worked 3YS, 3AB4 and 3BD. On the 18th, 3HT was worked while on the 22nd from 0915 until 1520, Jack worked practically every VK active on the band. The running well over 50 at times. He was also in from 1800 to 1945 on the 24th and made quite a number of contacts.

On the 25th, there was a daily occurrence during the month and only the outstanding ones will be reported in detail.

8th of January: VK4s contacted from 1100-1340. VK4s and VK5s from 1310 to 2300. Very short skip noticed with 2GU, of Canberra, putting an 89 plus signal into Melbourne for quite some time.

15th: 1100 to 1500—VK2s and VK4s contacted.

16: 1730-2000—VK4s worked. 1850-1930—VK5JD contacted.

22nd: Possibly the best day this season. 0815-1200—VK4s contacted; 0915-1530—3JBD contacted; 1020-1800—VK4s worked; 1530-1800 and 1030-2015—VK5s worked. Very terrific signals; 2000-2230—VK5s contacted again.

24th: 1800-1945—JJD audible. 1825-2215—VK4s and VK4s contacted.

29th: 0900-1430—VK4s contacted; 1000-1045—VK2s worked.

At the time of writing the last opening was on the 6th of February when from 0830-1120, VK4s were contacted and it appears conditions are now possibly as sporting as before.

Some more extended ground wave work has been carried out between VK3 and VK7. On the 30th of January, 7XL worked 3ACL at 1040 with 88 signals and 3XA at Mitham (230 miles) with 89 signals. 7XL was very steady at 83A, and the absence of fading made it possible for them to have a complete QSO on phone. 7XL was also heard by 3VL at R5 82 to 8.

Two new country stations are active on the band. 3GV, of Colac, and 3AT, of Shepparton, the former has moved from Melbourne and has also worked plenty of DX. Melbourne stations will be looking for contacts with both these stations.

New voices heard on the band in the city came from 3ALM, of Row, with 13 watts to an 807 and a three element e.d. beam, putting out a good signal, and 3AVN, of Black Rock, who is using a 607 and 3LV, of Melbourne, who is also active from Traralgon Shire, has settled in the city and is active on six again.

144 Mc. DOINGS OF THE MONTH NEW SOUTH WALES

An excellent suggestion by Ken, 2AMH, that instead of making random calls on 2 metres, that throughout the 24 hours calling and listening be

done on the hour. Listening only is useless and it is hoped that Interstate 2 metre men will co-operate. So it is hoped that we will have in the shack, give a call and listen on the hour.

A discussion about the mod.-osc. and sharp receiver arrived at no real solution which seems to be inextricably tied up with "noise factors" and power of transmitters plus DX.

VICTORIA

There is little of a spectacular nature to report this month, with possibly the 50 Mc. activity reducing the numbers on the band. Conditions for work with Ballarat were noticeably better than usual on a few occasions and a number of Melbourne stations worked this area for the first time.

New stations on are 3FU, 3FJ, and 3HT, all using simple gear and putting out quite good signals. 3ACH now has a 607 and is consisting of a pair of CV4s driving an 832. This provides quite an improvement over the straight modulated oscillator.

A field day was held on the 5th of February, those out being 3YS at Mt. Macedon, 3FU Mt. Dandenong, 3JO One Tree Hill, and 3TO 400 ft. A.M. on a hill outside Yallourn, 75 miles from Melbourne. 3YS was the best DX station on the band although no records were broken, best DX being 3YS to 3TO, 110 miles. 3TO also worked a number of Melbourne stations; 3QB was successful with signals peaking 38 and fading right out.

288 Mc.—Newcomer to the band is 3BD who is using an m.o.p.a. consisting of a pair of RL18s driving an 832 to 25 watts. Receiver is a 955 super-reg. At the time of writing, 3BD worked 3AH and 3ED, the latter at a distance of 12 miles, the best DX for this band so far, although no double great distances will be covered before long. Other new paths are 3MD to 3IM, and 3IM to 3NW. Eight element broadside arrays are popular and those using this type of beam are 3LS, 3MD, 3ED, and 3BD. Main disadvantage seems to be rather sharp horizontal directivity.

576 Mc.—There is little to write about concerning this band this month. Absence of further portable work has prevented the establishment of any new records and the only new record noted is that between 3XA and 3IM, about 12 miles.

2300 Mc.—3XA, 3NW, and 3AKZ are now all set up for two-way work on this band and tests are being carried out. 3AKZ is now working from Rangewar where Ken, 3XW, will be on holidays, to the other two stations. 3NW and 3XA have worked over a distance of about one mile (Ken took his rig to the car) with very strong signals, so we hope to have some real DX contacts to report next month.

A SUBSTITUTE FOR THE CAPACITY TYPE LIGHTNING ARRESTOR

The capacity type lightning arrestor consisting, as it does, of two metal plates mounted in close proximity on an insulating block is generally not suitable for use on transmitting antennae. A far more efficient method of keeping the antenna at earth potential, that is as far as static charges are concerned, is to place an inductance between ground and antenna.

The inductance is constructed so that it offers a very high impedance to frequencies which are to be used. In practice, it will be found that a coil close to the length of three inches with No. 32 gauge 5/8 in. enameled wire on a former one inch in diameter will be suitable for frequencies between 0.5 and 30 Mc.

For frequencies above 30 Mc., a coil with such a large number of turns would not be necessary and it is therefore suggested that 100 turns be used in this instance.

In the case of a doublet antenna, it will, of course, be necessary to use two inductances connected, one between each feeder wire and earth.—VK3KF.



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section. Even so, as far as known at the time of writing, only VK3 JJD, 3EE, 3UM and 4GB were "on deck."

This is most disappointing to the Contest Manager, and suggestions would be more than welcome for popularising this annual event. Please let your Divisional Council have suggestions.

FRENCH ANTARCTIC EXPEDITION

General details of this expedition were notified in last month's notes, and since then the station, FB5AX, has been in operation and VK7LZ made contact on the 4th February. The expedition is led by Kc. His note is chirpy, but he is putting a strong signal into VK7. As he is situated in Adeline Land, French Antarctica, he will be counted as a new country.

REMEMBRANCE DAY TROPHY

This trophy is at present doing a round of the Divisions in order that all might view this unique emblem symbolising our regard for the memory of those who have died in the service of their country. A photo of this trophy, place your order with your Division—prints will be approximately 1/6.

— — — — —

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Further to a note in this column in February "A.R." and "R.E." columns, Andre G. has been advised that Syd is not returning to VK, but expects to return to his home address of 14 Burley Wood View, Leeds, and, very shortly, he will then resume activities under a Q.C. sign.

Many cards are held at this Bureau for VK3WL. This station is apparently too lazy to reply to communications and despatches of cards sent to him, so cards will continue to be held here until some acknowledgment is received from him.

This Bureau urgently requires the current address of Mr. Allan Campbell-Drury, VK3ACD. Can anyone oblige? Attempts to obtain it through routine channels have been abortive. John Gore, VK3PO, please note.

The list of the Headquarters of the S.A.R.L. has been changed to P.O. Box 3911, Cape Town, South Africa. The address of the QSL Bureau remains unchanged as Box 3037 Cape Town, South Africa.

A card relating to a contact on 7 Mc. made on 19th March, 1948, has just been received from VK3YJZ, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

you have an honest Federal QSL Manager (sufficiently) to obtain it through routine channels. I wouldn't be telling you, and wouldn't be still waiting on 11 cards for DX C.C. and a permanent address. W.A.C. is a member of the number of rare DX stations who, when forwarding cards to the Federal Bureau for onward-forwarding to VK, enclose one or more blank cards. The continued receipt of these blank checks, beginning to wear the writer's resemblance down a little and it is becoming increasingly difficult to make his staminate name breed the instruction to "keep these behind me."

Sibirsky, LZ117, of 60 Gladston, Sofia, Bulgaria, writes: "To all VK Amateurs, Merry Xmas and very happy New Year! I shall be very happy if you can receive more of my VK QSLs which I need very for my first transmitting licence. I am a very experienced listener report about QSL and enable him to be the transmitting licence as Bulgarian stations are a little on the scarce side."

Referenced in the past to the death of our colleague PK6XA. The manner of his death was as follows: Bert, when in Macassar, PK6AX. (In 1952 writer contacted him as PK6AX at Bonting, in the Moluccas group.) After spending his leave in VK he was transferred to Morotai where he was active as PK6XA. At this time he was in the 14th Brigade. He was killed by a bullet from a mortar shell. A letter from VK3JJ, who was shocked to receive a letter from Mrs. Krygeman in September, 1948, stating that Bert had passed away at Sarong, New Guinea, from a heart attack. Bert was with him at the time. Mrs. Krygeman has since returned to Australia and as Sarong is not in Indonesia, her statement is beyond question. The full description, placed on cards returned by the N.V.R. recently, and mentioned in these notes.

Holidays have come and gone, but memories of pleasant times will linger in the writer's mind for many years. Appreciations are expressed to Ron VK3RX for the inability to drop in and see him when traversing Colac, but due to the weather. The yellow metal proved that it was as elusive as ever, but as expenses were made and the weather was not so good, the trip was not attempted. It is not certain whether an

attack of lumbago on return is a legacy from the pastime of due to struggling with antenna poles singlehanded.

Noel Roberts, ex-VK9NR, is currently on the air under the call sign of ZL30Z.

Through VK4GJ, ZS6D advises that he and ZS6D are going to Swaziland for a few weeks from the 1st of March. He will be on the air. They expect to use the call signs ZS7A and ZS7B respectively, but this is not yet certain. They propose to use the call sign ZS7A. ZS6D has not answered unless sent direct to ZS6D's office at 16 Fourth Avenue, Lambton, Melbourne. They will not use QSLs or call signs. S.A.R.L. This will be a unique chance to work ZS7.

Andre Baillet, a friend of Felix, FK5AC, has arrived in Noumea enroute to Wallis Island where Andre will take over the W.T. and met. station for a period of several days. Andre will be on the air. Andre will operate an Amateur Station under the probable call sign of FK5AA. No doubt Andre will be eager to work DX. He will be certain, but will take some time as there are only five mails per annum between Wallis Island and New Caledonia. Andre will not leave Wallis Island until approximately the beginning of May, and further information on the bands and frequencies he will be using will appear in these notes. Andre will be using the call sign of QJIM, QJLM, etc., and not to answer calls on his own frequency in an attempt to squash the call sign pile up on the frequency of rare DX stations and make their DX Ham activities a misery.

NEW SOUTH WALES

EASTERN SUBURBS ZONE

There has been a noticeable falling off in activities over the past month. This may have been due to a few claps doing the annual overhaul, but some of the silence has been caused by the wholesale destruction we suffered during the heavy nor-easter which hit us in the middle of the month. Many of our DX stations have been destroyed in varying degrees—2NO found a trouble in carrying a beam, a complete junk heap of wires, spruders and poly spacers. He replaced the array with a new 2NO 2A2G 2A2G dipole outfit which seems to be giving satisfaction.

Best news of the month in this area is that some of the boys are going v.h.f.—2APZ, 2AX, 2AF, 2AJ, 2AK, 2AL, 2AM, 2AN, 2AO, 2AP, 2AQ, 2AR, 2AS, 2AT, 2AU, 2AV, 2AW, 2AX, 2AY, 2AZ, 2BA, 2BB, 2BC, 2BD, 2BE, 2BF, 2BG, 2BH, 2BI, 2BJ, 2BK, 2BL, 2BM, 2BN, 2BO, 2BP, 2BQ, 2BR, 2BS, 2BT, 2BU, 2BV, 2BW, 2BX, 2BY, 2BZ, 2CA, 2CB, 2CC, 2CD, 2CE, 2CF, 2CG, 2CH, 2CI, 2CJ, 2CK, 2CL, 2CM, 2CN, 2CO, 2CP, 2CQ, 2CR, 2CS, 2CT, 2CU, 2CV, 2CW, 2CX, 2CY, 2CZ, 2DA, 2DB, 2DC, 2DD, 2DE, 2DF, 2DG, 2DH, 2DI, 2DJ, 2DK, 2DL, 2DM, 2DN, 2DO, 2DP, 2DQ, 2DR, 2DS, 2DT, 2DU, 2DV, 2DW, 2DX, 2DY, 2DZ, 2EA, 2EB, 2EC, 2ED, 2EE, 2EF, 2EG, 2EH, 2EI, 2EJ, 2EK, 2EL, 2EM, 2EN, 2EO, 2EP, 2EQ, 2ER, 2ES, 2ET, 2EU, 2EV, 2EW, 2EX, 2EY, 2EZ, 2FA, 2FB, 2FC, 2FD, 2FE, 2FF, 2FG, 2FH, 2FI, 2FJ, 2FK, 2FL, 2FM, 2FN, 2FO, 2FP, 2FQ, 2FR, 2FS, 2FT, 2FU, 2FV, 2FW, 2FX, 2FY, 2FZ, 2GA, 2GB, 2GC, 2GD, 2GE, 2GF, 2GG, 2GH, 2GI, 2GJ, 2GK, 2GL, 2GM, 2GN, 2GO, 2GP, 2GQ, 2GR, 2GS, 2GT, 2GU, 2GV, 2GW, 2GX, 2GY, 2GZ, 2HA, 2HB, 2HC, 2HD, 2HE, 2HF, 2HG, 2HH, 2HI, 2HJ, 2HK, 2HL, 2HM, 2HN, 2HO, 2HP, 2HQ, 2HR, 2HS, 2HT, 2HU, 2HV, 2HW, 2HX, 2HY, 2HZ, 2IA, 2IB, 2IC, 2ID, 2IE, 2IF, 2IG, 2IH, 2II, 2IJ, 2IK, 2IL, 2IM, 2IN, 2IO, 2IP, 2IQ, 2IR, 2IS, 2IT, 2IU, 2IV, 2IW, 2IX, 2IY, 2IZ, 2JA, 2JB, 2JC, 2JD, 2JE, 2JF, 2JG, 2JH, 2JI, 2JJ, 2JK, 2JL, 2JM, 2JN, 2JO, 2JP, 2JQ, 2JR, 2JS, 2JT, 2JU, 2JV, 2JW, 2JX, 2JY, 2JZ, 2KA, 2KB, 2KC, 2KD, 2KE, 2KF, 2KG, 2KH, 2KI, 2KJ, 2KK, 2KL, 2KM, 2KN, 2KO, 2KP, 2KQ, 2KR, 2KS, 2KT, 2KU, 2KV, 2KW, 2KX, 2KY, 2KZ, 2LA, 2LB, 2LC, 2LD, 2LE, 2LF, 2LG, 2LH, 2LI, 2LJ, 2LK, 2LL, 2LM, 2LN, 2LO, 2LP, 2LQ, 2LR, 2LS, 2LT, 2LU, 2LV, 2LW, 2LX, 2LY, 2LZ, 2MA, 2MB, 2MC, 2MD, 2ME, 2MF, 2MG, 2MH, 2MI, 2MJ, 2MK, 2ML, 2MN, 2MO, 2MP, 2MQ, 2MR, 2MS, 2MT, 2MU, 2MV, 2MW, 2MX, 2MY, 2MZ, 2NA, 2NB, 2NC, 2ND, 2NE, 2NF, 2NG, 2NH, 2NI, 2NJ, 2NK, 2NL, 2NM, 2NO, 2NP, 2NQ, 2NR, 2NS, 2NT, 2NU, 2NV, 2NW, 2NX, 2NY, 2NZ, 2OA, 2OB, 2OC, 2OD, 2OE, 2OF, 2OG, 2OH, 2OI, 2OJ, 2OK, 2OL, 2OM, 2ON, 2OO, 2OP, 2OQ, 2OR, 2OS, 2OT, 2OU, 2OV, 2OW, 2OX, 2OY, 2OZ, 2PA, 2PB, 2PC, 2PD, 2PE, 2PF, 2PG, 2PH, 2PI, 2PJ, 2PK, 2PL, 2PM, 2PN, 2PO, 2PP, 2PQ, 2PR, 2PS, 2PT, 2PU, 2PV, 2PW, 2PX, 2PY, 2PZ, 2QA, 2QB, 2QC, 2QD, 2QE, 2QF, 2QG, 2QH, 2QI, 2QJ, 2QK, 2QL, 2QM, 2QN, 2QO, 2QP, 2QQ, 2QR, 2QS, 2QT, 2QU, 2QV, 2QW, 2QX, 2QY, 2QZ, 2RA, 2RB, 2RC, 2RD, 2RE, 2RF, 2RG, 2RH, 2RI, 2RJ, 2RK, 2RL, 2RM, 2RN, 2RO, 2RP, 2RQ, 2RR, 2RS, 2RT, 2RU, 2RV, 2RW, 2RX, 2RY, 2RZ, 2SA, 2SB, 2SC, 2SD, 2SE, 2SF, 2SG, 2SH, 2SI, 2SJ, 2SK, 2SL, 2SM, 2SN, 2SO, 2SP, 2SQ, 2SR, 2SS, 2ST, 2SU, 2SV, 2SW, 2SX, 2SY, 2SZ, 2TA, 2TB, 2TC, 2TD, 2TE, 2TF, 2TG, 2TH, 2TI, 2TJ, 2TK, 2TL, 2TM, 2TN, 2TO, 2TP, 2TQ, 2TR, 2TS, 2TT, 2TU, 2TV, 2TW, 2TX, 2TY, 2TZ, 2UA, 2UB, 2UC, 2UD, 2UE, 2UF, 2UG, 2UH, 2UI, 2UJ, 2UK, 2UL, 2UM, 2UN, 2UO, 2UP, 2UQ, 2UR, 2US, 2UT, 2UU, 2UV, 2UW, 2UX, 2UY, 2UZ, 2VA, 2VB, 2VC, 2VD, 2VE, 2VF, 2VG, 2VH, 2VI, 2VJ, 2VK, 2VL, 2VM, 2VN, 2VO, 2VP, 2VQ, 2VR, 2VS, 2VT, 2VU, 2VV, 2VW, 2VX, 2VY, 2VZ, 2WA, 2WB, 2WC, 2WD, 2WE, 2WF, 2WG, 2WH, 2WI, 2WJ, 2WK, 2WL, 2WM, 2WN, 2WO, 2WP, 2WQ, 2WR, 2WS, 2WT, 2WU, 2WV, 2WW, 2WX, 2WY, 2WZ, 2XA, 2XB, 2XC, 2XD, 2XE, 2XF, 2XG, 2XH, 2XI, 2XJ, 2XK, 2XL, 2XM, 2XN, 2XO, 2XP, 2XQ, 2XR, 2XS, 2XT, 2XU, 2XV, 2XW, 2XX, 2XY, 2XZ, 2YA, 2YB, 2YC, 2YD, 2YE, 2YF, 2YG, 2YH, 2YI, 2YJ, 2YK, 2YL, 2YM, 2YN, 2YO, 2YP, 2YQ, 2YR, 2YS, 2YT, 2YU, 2YV, 2YW, 2YX, 2YY, 2YZ, 2ZA, 2ZB, 2ZC, 2ZD, 2ZE, 2ZF, 2ZG, 2ZH, 2ZI, 2ZJ, 2ZK, 2ZL, 2ZM, 2ZN, 2ZO, 2ZP, 2ZQ, 2ZR, 2ZS, 2ZT, 2ZU, 2ZV, 2ZW, 2ZX, 2ZY, 2ZZ, 3AA, 3AB, 3AC, 3AD, 3AE, 3AF, 3AG, 3AH, 3AI, 3AJ, 3AK, 3AL, 3AM, 3AN, 3AO, 3AP, 3AQ, 3AR, 3AS, 3AT, 3AU, 3AV, 3AW, 3AX, 3AY, 3AZ, 3BA, 3BB, 3BC, 3BD, 3BE, 3BF, 3BG, 3BH, 3BI, 3BJ, 3BK, 3BL, 3BM, 3BN, 3BO, 3BP, 3BQ, 3BR, 3BS, 3BT, 3BU, 3BV, 3BW, 3BX, 3BY, 3BZ, 3CA, 3CB, 3CC, 3CD, 3CE, 3CF, 3CG, 3CH, 3CI, 3CJ, 3CK, 3CL, 3CM, 3CN, 3CO, 3CP, 3CQ, 3CR, 3CS, 3CT, 3CU, 3CV, 3CW, 3CX, 3CY, 3CZ, 3DA, 3DB, 3DC, 3DD, 3DE, 3DF, 3DG, 3DH, 3DI, 3DJ, 3DK, 3DL, 3DM, 3DN, 3DO, 3DP, 3DQ, 3DR, 3DS, 3DT, 3DU, 3DV, 3DW, 3DX, 3DY, 3DZ, 3EA, 3EB, 3EC, 3ED, 3EE, 3EF, 3EG, 3EH, 3EI, 3EJ, 3EK, 3EL, 3EM, 3EN, 3EO, 3EP, 3EQ, 3ER, 3ES, 3ET, 3EU, 3EV, 3EW, 3EX, 3EY, 3EZ, 3FA, 3FB, 3FC, 3FD, 3FE, 3FF, 3FG, 3FH, 3FI, 3FJ, 3FK, 3FL, 3FM, 3FN, 3FO, 3FP, 3FQ, 3FR, 3FS, 3FT, 3FU, 3FV, 3FW, 3FX, 3FY, 3FZ, 3GA, 3GB, 3GC, 3GD, 3GE, 3GF, 3GG, 3GH, 3GI, 3GJ, 3GK, 3GL, 3GM, 3GN, 3GO, 3GP, 3GQ, 3GR, 3GS, 3GT, 3GU, 3GV, 3GW, 3GX, 3GY, 3GZ, 3HA, 3HB, 3HC, 3HD, 3HE, 3HF, 3HG, 3HH, 3HI, 3HJ, 3HK, 3HL, 3HM, 3HN, 3HO, 3HP, 3HQ, 3HR, 3HS, 3HT, 3HU, 3HV, 3HW, 3HX, 3HY, 3HZ, 3IA, 3IB, 3IC, 3ID, 3IE, 3IF, 3IG, 3IH, 3II, 3IJ, 3IK, 3IL, 3IM, 3IN, 3IO, 3IP, 3IQ, 3IR, 3IS, 3IT, 3IU, 3IV, 3IW, 3IX, 3IY, 3IZ, 3JA, 3JB, 3JC, 3JD, 3JE, 3JF, 3JG, 3JH, 3JI, 3JJ, 3JK, 3JL, 3JM, 3JN, 3JO, 3JP, 3JQ, 3JR, 3JS, 3JT, 3JU, 3JV, 3JW, 3JX, 3JY, 3JZ, 3KA, 3KB, 3KC, 3KD, 3KE, 3KF, 3KG, 3KH, 3KI, 3KJ, 3KK, 3KL, 3KM, 3KN, 3KO, 3KP, 3KQ, 3KR, 3KS, 3KT, 3KU, 3KV, 3KW, 3KX, 3KY, 3KZ, 3LA, 3LB, 3LC, 3LD, 3LE, 3LF, 3LG, 3LH, 3LI, 3LJ, 3LK, 3LL, 3LM, 3LN, 3LO, 3LP, 3LQ, 3LR, 3LS, 3LT, 3LU, 3LV, 3LW, 3LX, 3LY, 3LZ, 3MA, 3MB, 3MC, 3MD, 3ME, 3MF, 3MG, 3MH, 3MI, 3MJ, 3MK, 3ML, 3MN, 3MO, 3MP, 3MQ, 3MR, 3MS, 3MT, 3MU, 3MV, 3MW, 3MX, 3MY, 3MZ, 3NA, 3NB, 3NC, 3ND, 3NE, 3NF, 3NG, 3NH, 3NI, 3NJ, 3NK, 3NL, 3NM, 3NO, 3NP, 3NQ, 3NR, 3NS, 3NT, 3NU, 3NV, 3NW, 3NX, 3NY, 3NZ, 3OA, 3OB, 3OC, 3OD, 3OE, 3OF, 3OG, 3OH, 3OI, 3OJ, 3OK, 3OL, 3OM, 3ON, 3OO, 3OP, 3OQ, 3OR, 3OS, 3OT, 3OU, 3OV, 3OW, 3OX, 3OY, 3OZ, 3PA, 3PB, 3PC, 3PD, 3PE, 3PF, 3PG, 3PH, 3PI, 3PJ, 3PK, 3PL, 3PM, 3PN, 3PO, 3PP, 3PQ, 3PR, 3PS, 3PT, 3PU, 3PV, 3PW, 3PX, 3PY, 3PZ, 3QA, 3QB, 3QC, 3QD, 3QE, 3QF, 3QG, 3QH, 3QI, 3QJ, 3QK, 3QL, 3QM, 3QN, 3QO, 3QP, 3QQ, 3QR, 3QS, 3QT, 3QU, 3QV, 3QW, 3QX, 3QY, 3QZ, 3RA, 3RB, 3RC, 3RD, 3RE, 3RF, 3RG, 3RH, 3RI, 3RJ, 3RK, 3RL, 3RM, 3RN, 3RO, 3RP, 3RQ, 3RR, 3RS, 3RT, 3RU, 3RV, 3RW, 3RX, 3RY, 3RZ, 3SA, 3SB, 3SC, 3SD, 3SE, 3SF, 3SG, 3SH, 3SI, 3SJ, 3SK, 3SL, 3SM, 3SN, 3SO, 3SP, 3SQ, 3SR, 3SS, 3ST, 3SU, 3SV, 3SW, 3SX, 3SY, 3SZ, 3TA, 3TB, 3TC, 3TD, 3TE, 3TF, 3TG, 3TH, 3TI, 3TJ, 3TK, 3TL, 3TM, 3TN, 3TO, 3TP, 3TQ, 3TR, 3TS, 3TT, 3TU, 3TV, 3TW, 3TX, 3TY, 3TZ, 3UA, 3UB, 3UC, 3UD, 3UE, 3UF, 3UG, 3UH, 3UI, 3UJ, 3UK, 3UL, 3UM, 3UN, 3UO, 3UP, 3UQ, 3UR, 3US, 3UT, 3UU, 3UV, 3UW, 3UX, 3UY, 3UZ, 3VA, 3VB, 3VC, 3VD, 3VE, 3VF, 3VG, 3VH, 3VI, 3VJ, 3VK, 3VL, 3VM, 3VN, 3VO, 3VP, 3VQ, 3VR, 3VS, 3VT, 3VU, 3VV, 3VW, 3VX, 3VY, 3VZ, 3WA, 3WB, 3WC, 3WD, 3WE, 3WF, 3WG, 3WH, 3WI, 3WJ, 3WK, 3WL, 3WM, 3WN, 3WO, 3WP, 3WQ, 3WR, 3WS, 3WT, 3WU, 3WV, 3WW, 3WX, 3WY, 3WZ, 3XA, 3XB, 3XC, 3XD, 3XE, 3XF, 3XG, 3XH, 3XI, 3XJ, 3XK, 3XL, 3XM, 3XN, 3XO, 3XP, 3XQ, 3XR, 3XS, 3XT, 3XU, 3XV, 3XW, 3XX, 3XY, 3XZ, 3YA, 3YB, 3YC, 3YD, 3YE, 3YF, 3YG, 3YH, 3YI, 3YJ, 3YK, 3YL, 3YM, 3YN, 3YO, 3YP, 3YQ, 3YR, 3YS, 3YT, 3YU, 3YV, 3YW, 3YX, 3YY, 3YZ, 3ZA, 3ZB, 3ZC, 3ZD, 3ZE, 3ZF, 3ZG, 3ZH, 3ZI, 3ZJ, 3ZK, 3ZL, 3ZM, 3ZN, 3ZO, 3ZP, 3ZQ, 3ZR, 3ZS, 3ZT, 3ZU, 3ZV, 3ZW, 3ZX, 3ZY, 3ZZ, 4AA, 4AB, 4AC, 4AD, 4AE, 4AF, 4AG, 4AH, 4AI, 4AJ, 4AK, 4AL, 4AM, 4AN, 4AO, 4AP, 4AQ, 4AR, 4AS, 4AT, 4AU, 4AV, 4AW, 4AX, 4AY, 4AZ, 4BA, 4BB, 4BC, 4BD

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M.G. bashed in? Hard luck John, what about a letter on the subject. Peter, 3APF, worked Boggong from Shepparton on 144 Mc.

CENTRAL WESTERN ZONE

As reported in the last notes, the Bendix power supply has been built and tested, and by the time these notes appear in other directions 2.5 and 7 Mc. so don't hide your light under the bush and let us know all the details.

Members are also reminded of those prizes donated by 3TA for v.h.f. work in the zone, and also for technical advances in other directions 2.5 and 7 Mc. so don't hide your light under the bush and let us know all the details.

Had a visit in person from our worthy President (30X), a solid 30X for one hour, and reacted to the annoyance of some pill swallowers. George is a busy man these days, and the "Radio Centre" suffers as the result, he is also unloading a lot of his disposal gear.

Our v.h.f. twins, 3DP and 3AKP, are now busy building "Lento" four element beams in an endeavour to create bigger and better 144 Mc. signs in Stawell and Deep Lead. 3AKP has been having trouble with the 14 Mc. beam in the way of crystal lead bolts which have the habit of snapping off and causing the elements to do likewise, so apparently there is more to it than just putting them up and working the DX.

3AJ0 is still re-building. John has had so many brain waves since he started, they have gummed the works up properly. 3IG has at long last departed for Melbourne, so Maryborough and districts thereabouts should be much quieter, best of luck, Kevin. 3XU has been fighting with the top draw over the past few weeks, entertaining the Governor and arrangements thereto certainly kept George busy. Being busy, reminds me to tell you sleeping books about the same hook-up. It's at 10 a.m. on the second Sunday of the month on a frequency of approx. 7155 Kc., will we be hearing you!

SOUTH WESTERN ZONE

My Geelong correspondent has again come to the rescue and I would like to place my thanks on record for the excellent job he is doing. His opening remark is usually to the effect that there has been little activity and then proceeds to give a page of dope. So let's get stuck into it. 3WT getting out nicely to the DX on 20 with his new rig. 3BU been bashing the 40 metre boys to the extent of over 50 contacts in a short while at Christmas. 580 Mc. has drawn another enthusiast in 3APG. 3AJT doing nicely with the DX on 20 and hopes to get his three element rotary on the tower soon. Novice activity low in here on short skip OM. Understand you have a nice location on top of a hill. 5AIG has his modulator going much better. 3BW is too busy to operate, and 3BW is not been heard for a while. 3ABR now working in Melbourne, expect to hear his portable call 3ABW shortly.

Heard 3AKR getting some good advice about XYLs from 3AGD and 3BI the other night. Maybe Kevin is jibbing. 3VA seems to have deserted 20 metre these days, probably "batching" did not suit him. Visited 3BH at his new QTH the other day. Very compact rig. Mart has, 3ASV never heard and rarely seen these days, less QRM for your truly. 3AAT has been re-built and clearing up rig in general. Also building up a portable rig for holidays. 3GR heard on 40 metres, seems to have given up away, down him either way. 3IWF is nearly satisfied that his four element is tuned, and has so far failed to live up to his New Year resolution of more listening and less talking.

I must take the opportunity of welcoming a new Ham, 3AYX, who is at the R.A.A.F. camp. Hope to hear you soon VY. 3AAW, who used to operate from the camp in the new turned up 4TU and nearly made a VK9 call, best of luck to you Bill.

Geelong Amateur Radio Club.—The first meeting for the year was held on 4/1/50, after the business of the Club had been discussed, numbers, visited the shack of Dick Hightway, 3ABK, and inspected his gear. Undergoing alteration was a 7A1D. The second meeting was in the hands of the new member, Jack Mitchell, who chose for his subject, "The Theory of Wave Guides." This was new to members and proved interesting. The following night took the form of a field night and d.f. loop antennae were the order of the night, trying to locate the hidden transmitter operating under the club's call sign. 3ATL and operated by 3W. None of the members were successful in locating the transmitter in the allotted time. 3SY and 3ALD, who had struck trouble with their equipment and were late in starting, were only two streets away when the transmitter gave out its location. In spite of the wet weather, quite a few members joined in the fun.

QUEENSLAND

Notes for the month are very scarce, these notes being written during the annual vacation period. It is a holidaying in VK. Had a little activity on a complete rest. Our zone managers were evidently enjoying the holiday period and no notes were sent. These sources are: 401, except 401, 401, who sent in some notes for the Novosa Zone. Other notes contained herein were compiled by reading your mail since my return a few days ago.

Main items of news during January was the National Field Day. A few VK4s went out into the country, notably 4AMF, 4AP, 4AL, 4AL, 4AP, and 4EL. Don't know of any others. Conditions were very poor and a few 7 Mc. signs heard. 4AL had a little better activity, only exception being 4CU. Charlie has excellent gear for portable work and his phone was up to the usual V.h.f. standard. All except Charlie seem to have had a very lean time. Charlie had time to work on 50 Mc. and finished the week-end with well over one thousand points. 4XR and 4KK also got their share of the 50 Mc. break. Later we heard that 4AP and 4EL worked 19 countries, W.A.C. on 14 Mc. and gained 400 points on c.w. alone.

Speaking of 50 Mc., we often wonder why the Toowoomba gang don't operate on this band. 4CU never fails to fill a couple of pages of the log whenever he goes portable on the outskirts of the woomba. There should be a 24 hour a day channel between Toowoomba and Brisbane and surrounding districts. VK4 boys at Eastwood are making contacts with Sydney can be made any hour of the day or night.

The general meeting in February was presided over by the retiring President, 4AW. Attendance was very poor considering that the meeting was held to call for nominations for the coming year. Visitor to the meeting was G3DWI mobile marine. Nominations were received for all the positions with 4AW. A ballot will be held for the other vacancies. The position of Country Rep. will, for the first time in three years, be taken over by a new man. The retiring officer, 4SW, having served in that capacity since the creation of the position, will not be a candidate because other ties prevent his regular attendance at the monthly meetings.

BRISBANE ZONE

4JA has completed an f.h. lattice tower some 30 ft. high on which he is going to hang long wires under a three element 20 metre beam. 4AF has forsaken 28 Mc. and was heard knocking "em over on 14 Mc. in the recent R.E.R.U. Contest. 4GB was heard "mowing 'em down" during the National Field Day with a beautiful 70X note, was using 4Gpp osc. and 807 final, 28 watts and a 130 ft. matched impedance ant. is believed to have W.A.C. and worked 19 countries in a 24 hour session. 4RC still using only an exciter unit and mediating what to put in the final Goodness knows what will happen when he does decide on a final, as he made over 1,200 points in the recent R.E.R.U. Contest with 25-24 watts on the exciter, even working G on the 14 Mc. vertical but 7 Mc.

4FP not been very active of late, but has all the cards in for his DX C.C. also has been between 60-70 countries on phone confirmed. 4EL has not been active for some time other than helping to swell 4GB's N.F.D. score, however he has recently sent away his cards for W.A.Z., only one more to get now Empire DX C.C. still a few more cards to get yet. 4HR also has not been too active, does not need to be, as talking of Empire DX C.C., Tibby has the only one in VK4 and we think the 2nd in VK. He is going to do now. Heard on 7 Mc. with a 400 ft. cable, 4MP, recently from a local seaside resort putting out a good signal. Don't know how he managed to do it and as the signal was sent away local W.L.A. transmitter going on multi-channel. 4MD has been trying out phase modulation and

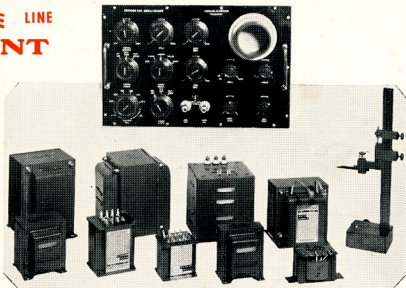
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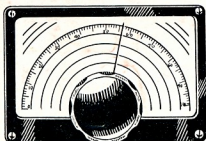
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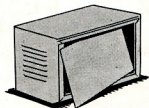


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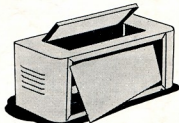
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